

Chronic Disease Indicators: Indicator Definition



Hospitalization for congestive heart failure

Category:	Cardiovascular Disease
Demographic Group:	All resident persons.
Numerator:	Hospitalizations (not unduplicated*) with principal diagnosis of International Classification of Diseases (ICD)-9-CM code 428.0 among residents during a calendar year. When possible, include hospitalizations for residents who are hospitalized in another state.
Denominator:	Midyear resident population for the same calendar year.
Measures of Frequency:	Annual number of hospitalizations. Annual hospitalization rate — crude and age-adjusted (standardized by the direct method to the year 2000 standard U.S. population, distribution 1†) — with 95% confidence interval.
Time Period of Case Definition:	Calendar year.
Background:	Congestive heart failure (CHF) is the leading principal diagnosis for Medicare hospital claims.
Significance :	Approximately 75% of persons with CHF have antecedent hypertension. During 1979–1996, hospitalizations for CHF increased by 130%. Substantial differences in CHF death rates and preventive measures exist by race, age, sex, place of residence, and other demographic factors.
Limitations of Indicator:	Because congestive heart failure is a chronic disease which can have a long preclinical phase, years might pass before changes in behavior or clinical practice affect population morbidity and mortality.
Data Resources:	State hospital discharge data (numerator) and population estimates from the U.S. Bureau of the Census or suitable alternative (denominator).
Limitations of Data Resources:	Diagnoses listed on hospital discharge data might be inaccurate. Practice patterns and payment mechanisms can affect decisions by health-care providers to hospitalize patients. Residents of one state might be hospitalized in another state and not be reflected in the first state's hospital data set. Multiple admissions for an individual patient could falsely elevate the number of persons hospitalized. Because state hospital discharge data are not universally available, aggregation of state data to produce nationwide estimates will be incomplete.
Healthy People 2010 Objectives:	12-6: Reduce hospitalizations of older adults with congestive heart failure as the principal diagnosis. (12-6a is specific for adults aged 65–74 years; 12-6b is specific for adults aged 75–84 years; 12-6c is specific for adults aged ≥85 years.)

* The term not unduplicated refers to the fact that one person might account for multiple admissions. † See Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics, 2001. Healthy people 2010 statistical notes, no. 20. <http://www.cdc.gov/nchs/data/statnt/statnt20.pdf>